



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/726,435

12/03/2003

Adam Weisz

18104 (AT20958-62)

5810

7590

10/19/2005

Robert Kapalka
Tyco Electronics Corporation
Suite 140
4550 New Linden Hill Road
Wilmington, DE 19808

EXAMINER

LEVI, DAMEON E

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **UK**

10/726,435

Applicant(s)

WEISZ ET AL.

Examiner

Dameon E. Levi

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5,7,8,10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maue et al US Patent 5995380 in view of Cornell et al US Patent 6424520.

Regarding claim 1, Maue et al discloses an electronic module comprising:

an insulative housing having opposed first and second surfaces(for example, see elements 41,43, Figs 1-3) ,

at least one circuit board(for example, see element 51, Figs 1-3) contained within the housing;

a plurality of connectors (for example, see elements 117,103 Figs 1-3) coupled to the circuit board, at least some of the connectors accessible within openings extending through the first surface of the housing;

at least one fuse(for example, see elements 17, Figs 1-3) electrically coupled to the circuit board;

Maue et al does not expressly disclose

an insulative fuse door sealingly engaged to the second surface of the housing and positionable with respect to the housing to provide access to the fuse from an exterior of the housing.

Art Unit: 2841

Cornell et al discloses an assembly disclosing an insulative fuse door (for example, see element 16, Figs 1-9) sealingly engaged to the second surface of a housing (for example, see element 14, Figs 1-9) and positionable with respect to the housing to provide access to the fuse from an exterior of the housing.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a fuse door on the second surface of the housing as taught by Cornell et al in the apparatus as taught by Maue et al for the purpose of providing an access patch to gain access to fuses (elements 34) housed therein (see Cornell et al column 2, lines 32-34).

Regarding claim 2, Maue et al discloses wherein the housing comprises a connector portion defining the first surface (for example, see elements 27, Figs 1-3) and a cover portion sealingly engaged to the connector portion and defining the second surface (for example, see cover portions attached to element 15, and associated with, element 27, Figs 1-3).

Regarding claim 3, Maue et al discloses wherein the housing comprises a plurality of integrally molded connector receptacles extending outwardly from the first surface and away from the second surface (for example, see elements 27 on element 41, away from elements 43, Figs 1-3).

Regarding claim 4, the intended use recitation [...wherein the connectors are configured to engage 0.64 GET terminal system connectors], it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus (Maue

Art Unit: 2841

et al) satisfying the claimed structural limitations. Additionally, the Office objects to the inclusion of 0.64 GET terminal system connectors as recited in the claims since 0.64 GET is a designation of a changeable connector type specification.

Regarding claim 5, Maue et al discloses further comprising a second circuit board contained in the housing(for example, see column 2, lines 54-55).

Regarding claim 7, Maue et al discloses the instant claimed invention except wherein the fuse door comprises an exterior surface, at least a portion of the exterior surface being depressed relative to a second surface of the housing.

Cornell et al discloses an apparatus wherein the fuse door comprises an exterior surface, at least a portion of the exterior surface being depressed relative to a second surface of the housing(for example, see element 14, Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have arranged the door in the manner as taught by Cornell et al in the apparatus as taught by Maue et al so as to enable a snug fit of the door within the access opening.

Regarding claim 8, Maue et al discloses the instant claimed invention except wherein the fuse door is removable from the housing.

Cornell et al discloses an apparatus wherein the fuse door is removable from the housing(for example, see element 14, Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the door removable as taught by Cornell et al in the

Art Unit: 2841

apparatus as taught by Maue et al for the purpose of facilitating access to the components housed therein.

Regarding claim 10, Maue et al discloses an electronic module comprising:

an insulative housing having a plurality of integrally formed connector receptacles on one side of the housing(for example, see elements 41,43,27 Figs 1-3);

at least one printed circuit board(for example, see element 51, Figs 1-3) contained within the housing;

a plurality of connectors(for example, see elements 117, Figs 1-3) coupled to the circuit board and extending into the connector receptacles;

at least one fuse (for example, see elements 17, Figs 1-3) electrically coupled to the circuit board;

Maue et al does not disclose:

an insulative fuse door sealingly engaged to the housing beneath the connector receptacles and positionable to provide access to the fuse from an exterior of the housing.

Cornell et al discloses an apparatus wherein an insulative fuse door sealingly engaged to the housing beneath the connector receptacles and positionable to provide access to the fuse from an exterior of the housing(for example, see element 16, 34 Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a fuse door beneath the connector receptacles of the housing as taught by Cornell et al in the apparatus as taught by Maue et al for the

Art Unit: 2841

purpose of providing an access patch to gain access to fuses(elements 34) housed therein(see Cornell et al column 2, lines 32-34).

Regarding claim 11, Maue et al discloses the instant claimed invention except wherein the fuse door coupled to the cover portion opposite the connector portion.

Cornell et al discloses an apparatus wherein a fuse door coupled to the cover portion opposite a connector portion(for example, see element 16, Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a fuse door on the second surface of the housing as taught by Cornell et al in the apparatus as taught by Maue et al for the purpose of providing an access patch to gain access to fuses(elements 34) housed therein(see Cornell et al column 2, lines 32-34).

Regarding claim 12, the intended use recitation [...wherein the connectors are configured to engage 0.64 GET terminal system connectors], it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus(Maue et al) satisfying the claimed structural limitations. Additionally, the Office objects to the inclusion of 0.64 GET terminal system connectors as recited in the claims since 0.64 GET is a designation of a changeable connector type specification.

Regarding claim 13, Maue et al discloses further comprising a second circuit board contained in the housing(for example, see column 2, lines 54-55).

Regarding claim 14, Maue et al discloses wherein the fuse door is curved on one side thereof(for example, see elements 45, Figs 1-3).

Art Unit: 2841

Regarding claim 15, Maue et al discloses the instant claimed invention except wherein the fuse door comprises side walls and an exterior surface, at least a portion of the exterior surface being concave relative in an area spaced from the side walls.

Cornell et al discloses an apparatus wherein the fuse door comprises side walls and an exterior surface, at least a portion of the exterior surface being concave relative in an area spaced from the side walls (for example, see element 14, Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have arranged the door in the manner as taught by Cornell et al in the apparatus as taught by Maue et al so as to enable a snug fit of the door within the access opening.

Regarding claim 16, Maue et al discloses the instant claimed invention except wherein the fuse door is removable from the housing.

Cornell et al discloses an apparatus wherein the fuse door is removable from the housing (for example, see element 14, Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the door removable as taught by Cornell et al in the apparatus as taught by Maue et al for the purpose of facilitating access to the components housed therein.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maue et al US Patent 5995380 in view of Jarry et al US Patent 6563046.

Art Unit: 2841

Regarding claim 6, Maue et al discloses the instant claimed invention except wherein the fuse door includes side walls and a curved outer surface extending between the side walls.

Jarry et al discloses an apparatus wherein a door includes side walls and a curved outer surface extending between the side walls(for example, see elements 19, Figs 7).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have to have former the door in the manner as taught by Jarry et al in the apparatus as taught by Maue et al so as to fit a complementarily shaped access opening.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maue et al US Patent 5995380 in view of De Waal US Patent D361059.

Regarding claim 9, Maue et al discloses the instant claimed invention except wherein the fuse door includes an upstanding handle portion being substantially flush with the second surface when the fuse door is attached thereto.

De Waal discloses an apparatus wherein a door includes an upstanding handle portion being substantially flush with a surface when the door is attached thereto9for example, see Figs 1-21).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the handle in the manner as taught by De Waal in the as taught by Maue et al for the purpose of allowing a user to grasp the handle in order to gain access to the components housed therein.

Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maue et al US Patent 5995380 in view of Cornell et al US Patent 6430036 and further in view of Saka et al US Patent 5532431.

Regarding claim 17, Maue et al and Cornell et al disclose the instant claimed invention except wherein the housing comprises a first portion having a sealing groove;
a second portion having a sealing rim received in the groove; and
a seal member positioned in the groove and compressed by the rim.

Saka et al discloses an apparatus a housing comprises a first portion having a sealing groove(for example, see elements 4, 4a, Figs 1-8) a second portion having a sealing rim received in the groove(for example, see elements 1, 1a, Figs 1-8)
and a seal member(for example, see elements 6, Figs 2,3, elements 11a, Figs 4-8)
positioned in the groove and compressed by the rim.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a groove and rim with a seal member received therebetween as taught by Saka et al in the assembly as taught by Maue et al and Cornell et al as such an arrangement is known for providing a moisture proof enclosure for protecting components housed therein.

Regarding claim 18, Maue et al and Cornell et al disclose the instant claimed invention except wherein the fuse door comprises an outer perimeter and a seal member substantially coextensive with the outer perimeter.

Art Unit: 2841

Saka et al discloses an apparatus wherein the fuse door comprises an outer perimeter and a seal member substantially coextensive with the outer perimeter (for example, see elements 4, 6, 11a, Figs 1-6).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the seal member substantially coextensive with the outer perimeter of the fuse door as taught by Saka et al in the apparatus as taught by Maue et al and Cornell et al as such arrangement as such an arrangement is known for providing a moisture proof enclosure for protecting components housed therein.

Regarding claim 19, Maue et al discloses a module comprising:

an insulative housing comprising a connector portion having a plurality of internally formed connector receptacles on an upper surface thereof (for example, see elements 41, 43, 27 Figs 1-3);

and a cover portion (for example, see elements 27, 43, Figs 1-3) sealingly engaged to the connector portion opposite the connector portion;

at least one printed circuit board (for example, see elements 51, Figs 1-3) contained within the housing ,

a plurality of connectors (for example, see elements 117, Figs 1-3) coupled to the circuit board and extending into the connector receptacles;

at least one fuse (for example, see elements 17, Figs 1-3) electrically connected to the circuit board;

Maue et al does not expressly disclose:

Art Unit: 2841

an insulative fuse door removably engaged to a lower surface of the cover portion, or, the fuse door having a seal providing a moisture proof barrier when the fuse door is attached to the housing.

Cornell et al discloses an apparatus with an insulative fuse door removably engaged to a lower surface of a cover portion,

Saka et al discloses an apparatus that teaches a fuse door having a seal providing a moisture proof barrier when the fuse door is attached to a housing(for example, see elements 4, 6, 11a, Figs 1-6).

(for example, see element 16, 34 Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a fuse door beneath the connector receptacles of the housing as taught by Cornell et al in the apparatus as taught by Maue et al for the purpose of providing an access patch to gain access to fuses(elements 34) housed therein(see Cornell et al column 2, lines 32-34). In addition it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a fuse door with a seal as taught by Saka et al in the assembly as taught by Maue et al as such an arrangement is known for providing a moisture proof enclosure for protecting components housed within the enclosure.

Regarding claim 20, the intended use recitation [...wherein the connectors are configured to engage 0.64 GET terminal system connectors], it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus(Maue

Art Unit: 2841

et al) satisfying the claimed structural limitations. Additionally, the Office objects to the inclusion of 0.64 GET terminal system connectors as recited in the claims since 0.64 GET is a designation of a changeable connector type specification.

Regarding claim 21, Maue et al and Cornell et al discloses the instant claimed invention except wherein one of the connector portion and the cover portion comprises a sealing groove, the other of the connector portion and the cover portion comprises a sealing rim, and the control module further comprising a seal member, positioned in the groove and compressed by the rim when the cover portion is coupled to the connector portion.

Saka et al discloses an apparatus wherein one of the connector portion and the cover portion comprises a sealing groove(for example, see elements 4, 4a, Figs 1-8), the other of the connector portion and the cover portion comprises a sealing rim(for example, see elements 1, 1a, Figs 1-8), and the control module further comprising a seal member(for example, see elements 6, Figs 2,3, elements 11a, Figs 4-8) positioned in the groove and compressed by the rim when the cover portion is coupled to the connector portion.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a groove and rim with a seal member received therebetween as taught by Saka et al in the assembly as taught by Maue et al and Cornell et al as such an arrangement is known for providing a moisture proof enclosure for protecting components housed therein.

Art Unit: 2841

Regarding claim 22, Maue et al discloses wherein the fuse door comprises a recessed handle portion(for example, see element 45, Figs 1-3).

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dameon E. Levi whose telephone number is (571) 272-2105. The examiner can normally be reached on Mon.-Fri. (9:00 - 5:00).


Art Unit: 2841

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dameon E Levi
Examiner
Art Unit 2841

DEL


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800